

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
FINAL HARVEST LEVELS AND OTHER SPECIFICATIONS FOR 2003

Yelloweye Rockfish

The Scientific and Statistical Committee (SSC) reviewed the new yelloweye rockfish stock assessment (Exhibit C.3, Supplement NMFS Assessment Report, September 2002) and yelloweye rockfish rebuilding analysis (Exhibit C.3, Supplemental NMFS Report, September 2002). The SSC subscribes to the findings of the Stock Assessment Review (STAR) Panel that the new baseline stock assessment model represents the best available scientific information concerning the status of the stock and endorses the use of the assessment and rebuilding analysis by the Council in setting 2003 harvest levels. However, the SSC would like to underscore that great uncertainty remains about stock status and that strict reliance on the baseline model is not without considerable risk. In particular, the estimate of steepness from the spawner-recruit curve (0.437), which underlies stock productivity, is imprecisely estimated in the baseline assessment model. Given this level of uncertainty the SSC advises that the 2003 OY not exceed the Ad Hoc Allocation Committee's recommendation (22 mt), which is based upon rebuilding using the baseline model with a 50% probability of rebuilding by T_{MID} (halfway between T_{MIN} and T_{MAX}).

The new model is very different from the model considered by the Council in June. In particular, the following changes were implemented, (1) the assessment is based on a coastwide stock, (2) selectivity curves are now allowed to be dome-shaped, (3) the natural mortality rate is constant, (4) there are two informative new data sources (Washington sport catch per unit of effort [CPUE] and Oregon age compositions), and (5) California Marine Recreational Fisheries Statistics Survey (MRFSS) CPUE data were excluded from the model. The SSC notes that important model diagnostics (e.g., age and length composition residual plots) were unavailable in the documentation package. In addition, there was concern that incomplete justification was provided with respect to certain changes in the model's formulation (i.e., items 2 and 3 above). The rapid manner in which the assessment was prepared and reviewed between June and September no doubt contributed to these oversights and, as a consequence, the SSC recommends against future use of the accelerated stock assessment process that was used for yelloweye rockfish this year.

Bocaccio

New results from the Bocaccio Rebuilding Analysis for 2002 (Exhibit C.2.b) indicate that under the SSC's Guidelines for Rebuilding Overfished Stocks, which are consistent with the NMFS National Standard Guidelines, bocaccio will fail to rebuild by T_{MAX} with 50% probability, even with no catch. This curious result is due to the fact that the new bocaccio analysis is an update from the original rebuilding analysis and two unfavorable events have occurred since the original work, (1) the 1999 year-class is not considered to be as strong as previously believed, and (2) landings over the last three years have greatly exceeded the OY. Thus, because of the accelerated pace of removals and lower productivity, the stock will likely not rebuild by T_{MAX} , even with no catch.

The SSC discussed the recommendation of the Ad Hoc Allocation Committee (Exhibit C.3.f, Table 1) that the OY for bocaccio be as close to zero as possible, but not to exceed 20 mt. This recommendation is based upon a sustainability analysis that shows that at this level of harvest the stock will rebuild in 170 years with 50% probability, as opposed to 106 years under default policy. Moreover, at this harvest rate there is a low probability of further decline over the next 100 years.

The SSC concluded that the new rebuilding/sustainability analysis represents the best available scientific information concerning the status of the bocaccio stock and endorses its use by the Council in setting 2003 harvest levels. At this time bocaccio appears to be a very unproductive stock, which makes it extremely difficult to develop a rebuilding plan that will tolerate errors in the biological estimates, fishery management, or interactions with other fisheries (i.e., bycatch). These difficulties highlight the importance of developing sensible and robust procedures for updating rebuilding plans for overfished stocks, an issue

covered under Council agenda item C.7 (Amendment 16, Process and Standards for Developing Rebuilding Plans). The

SSC concluded that the proposed OY is technically sound, given the minimal surplus production of the bocaccio stock. However, the SSC notes that a new stock assessment will be conducted next year and further investigation of the stock-recruitment relationship and the appropriate natural mortality rate would be very useful.

Sablefish

The SSC notes that an OY of 5,000 mt, as recommended by the Ad Hoc Allocation Committee (Exhibit C.3.f), is consistent with the SSC's recommendation in June that a precautionary adjustment for this stock is warranted. To reiterate from that statement, the likelihood profile of the slope survey catchability coefficient was determined to be very flat, which creates substantial uncertainty with respect to total stock biomass. Therefore, the medium and high OY's (7,359 mt and 8,091 mt) are relatively risk-prone, and caution should be exercised when setting the 2003 harvest level.

Pacific Whiting

In June the SSC supported the recommendation of the 2002 whiting STAR Panel against adopting 2003 projections from the stock assessment model until a new assessment is conducted. This recommendation is consistent with the low OY option presented in Table 1 of the Ad Hoc Allocation Committee Report (Exhibit C.3.f), (i.e., 129,600 mt).

PFMC
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